PLAN ID: APARTMENT HOUSE - Option 3 Shed Dormer Apartment House

DESCRIPTION:

2 LEVEL 3 BED 3 BATH 2,493 SQ. FT.

APPLICABLE CODES:

RESIDENTIAL CODE: 2015 INTERNATIONAL RESIDENTIAL CODE
ACCESSIBILITY: 2009 ANSI A117.1 & TEXAS ACCESSIBILITY STANDARDS FAIR HOUSING

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CITY OF BRYAN
The Good Life, Texas Style.™

APARTMENT HOUSE
Option 3 Shed Dormer Apartment House
BRYAN, TEXAS

JOB NO.
180012

ISSUE DATE
8/25/20
CD

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COVER

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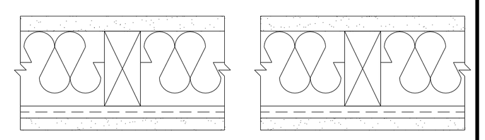
City of Bryan Texas in conjunction with the Midtown Area Plan

WALLS AND INTERIOR PARTITIONS, WOOD FRAMED

GA FILE NO. WP 3241 | **PROPRIETARY†** | **1 HOUR FIRE** | **50 to 54 STC SOUND**



GYPSUM WALLBOARD, RESILIENT CHANNELS, MINERAL FIBER INSULATION, WOOD STUDS

Resilient channels 24" o.c. attached at right angles to ONE SIDE of 2 x 4 wood studs 16" or 24" o.c. with 1 1/4" Type S drywall screws. One layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied parallel to channels with 1" Type S drywall screws 12" o.c. End joints backblocked with resilient channels. 3" mineral fiber insulation, 2.0 or 2.3 pcf, in stud space.

OPPOSITE SIDE: one layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied at right angles to studs with 1 1/4" Type W drywall screws 12" o.c.

Vertical joints staggered 48" on opposite sides. Sound tested with studs 16" o.c. and open face of mineral fiber insulation blankets toward resilient channel-side of stud space.
(LOAD-BEARING)

Thickness: 5 3/8"
Approx. Weight: 7 psf
Fire Test: Based on UL R3660-7, 11-12-87; UL R2717-61, 8-18-87; UL R7094, 10-24-90; UL Design U311
Sound Test: Estimated

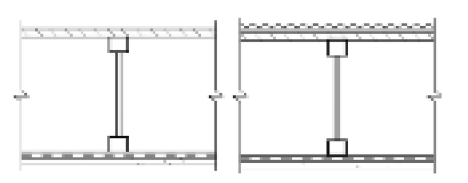
PROPRIETARY GYPSUM BOARD

American Gypsum Company	5/8" FIREBLOC TYPE C
CertainTeed Gypsum, Inc.	5/8" ProRoc™ Type C Gypsum Panels
G-P Gypsum	5/8" ToughRock® Fireguard® C
Lafarge North America Inc.	5/8" Firecheck® Type C
National Gypsum Company	5/8" Gold Bond® Brand FIRE-SHIELD C™ Gypsum Wallboard
PABCO Gypsum	1/2" FLAME CURB® Super 'C'
Temple-Inland Forest Products Corporation	5/8" TG-C

†Contact the manufacturer for more detailed information on proprietary products.

FLOOR-CEILING SYSTEMS, WOOD FRAMED

GA FILE NO. FC 5111 | **GENERIC** | **1 HOUR FIRE** | **50 to 54 STC SOUND**



WOOD I-JOISTS, GYPSUM WALLBOARD, RESILIENT CHANNELS

Base layer 1/2" type X gypsum wallboard applied at right angles to resilient channels 16" o.c. with 1 1/4" Type S drywall screws 12" o.c. Resilient channels applied at right angles to minimum 9 1/2" deep wood I-joists, with minimum 1 1/4" deep x 1 1/2" wide flanges and minimum 3/8" webs, 24" o.c. with 1 1/4" Type W drywall screws. **Face** layer 1/2" type X gypsum wallboard applied at right angles to channels with 1 5/8" Type S drywall screws 12" o.c. Face layer end joints located midway between channels and attached to base layer with 1 1/2" Type G screws 12" o.c. Edge joints offset 24" from base layer edge joints. Wood I-joists supporting 5/8" oriented strand board applied at right angles to I-joists with 8d common nails 12" o.c.

STC and IIC tested with 40 oz carpet over 1/4" foam pad.

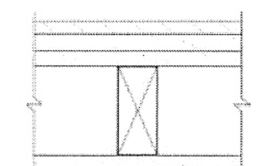
Approx. Ceiling Weight: 5 psf
Fire Test: NRCC A-4440.1 (Revised), 6-24-97
Sound Test: NRCC B-3150.2, 6-30-00 (68 C & P)
IIC & Test: NRCC B-3150.2, 6-30-00

ADD 3" MINERAL FIBER SOUND ATTENUATING INSULATION OVER RESILIENT CHANNELS BETWEEN JOISTS.

EXTERIOR WALL

ULC Design U302

GA FILE NO. WP 8415 | **GENERIC** | **2 HOUR FIRE**



GYPSUM SHEATHING, GYPSUM WALLBOARD, WOOD STUDS

EXTERIOR SIDE: **Base** layer 5/8" type X gypsum sheathing applied parallel or at right angles to 2 x 4 wood studs 24" o.c. with 6d coated nails, 1 7/8" long, 0.085" shank, 1/4" heads, 24" o.c. **Face** layer 5/8" type X gypsum sheathing applied parallel or at right angles to studs with 8d coated nails, 2 3/8" long, 0.100" shank, 1/4" heads, 8" o.c. Exterior cladding attached through sheathing to studs.

INTERIOR SIDE: **Base** layer 5/8" type X gypsum wallboard or gypsum veneer base applied paralle or at right angles to studs with 6d coated nails, 1 7/8" long, 0.085" shank, 1/4" heads, 24" o.c. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to studs with 8d coated nails, 2 3/8" long, 0.100" shank, 1/4" heads, 8" o.c.

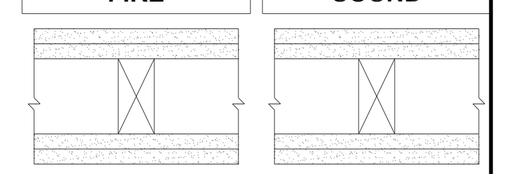
Joints staggered 24" each layer and side. **(LOAD-BEARING)**

Thickness: 6 1/8" without exterior cladding
Fire Test: See WP 4135 (FM WP 360, 9-27-74)

ADD MINIMUM R-15 INSULATION IN CAVITIES BETWEEN STUDS.

WALLS AND INTERIOR PARTITIONS, WOOD-FRAMED

GA FILE NO. WP 4135 | **GENERIC** | **2 HOUR FIRE** | **40 to 44 STC SOUND**



GYPSUM WALLBOARD, WOOD STUDS

Base layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to each side of 2 x 4 wood studs 24" o.c. with 6d coated nails, 1 7/8" long, 0.085" shank, 1/4" heads, 24" o.c. **Face** layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to each side with 8d coated nails, 2 3/8" long, 0.100" shank, 1/4" heads, 8" o.c.

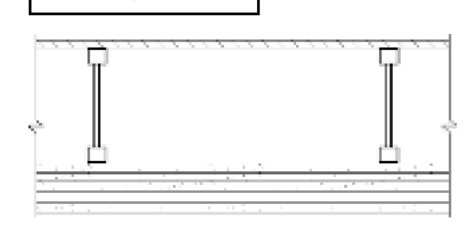
Joints staggered 24" each layer and side. Sound tested with studs 16" o.c. and with nails for **base** layer spaced 6" o.c. **(LOAD-BEARING)**

Thickness: 6 1/8"
Approx. Weight: 12 psf
Fire Test: FM WP 360, 9-27-74
Sound Test: NGC 2363, 4-1-70

ADD 3" MINERAL FIBER SOUND ATTENUATING INSULATION OVER RESILIENT CHANNELS BETWEEN JOISTS.

FLOOR-CEILING SYSTEMS, WOOD FRAMED

GA FILE NO. FC 5750 | **GENERIC** | **2 HOUR FIRE**



WOOD FLOOR, WOOD I-JOISTS, GYPSUM WALLBOARD, RIGID FURRING CHANNELS

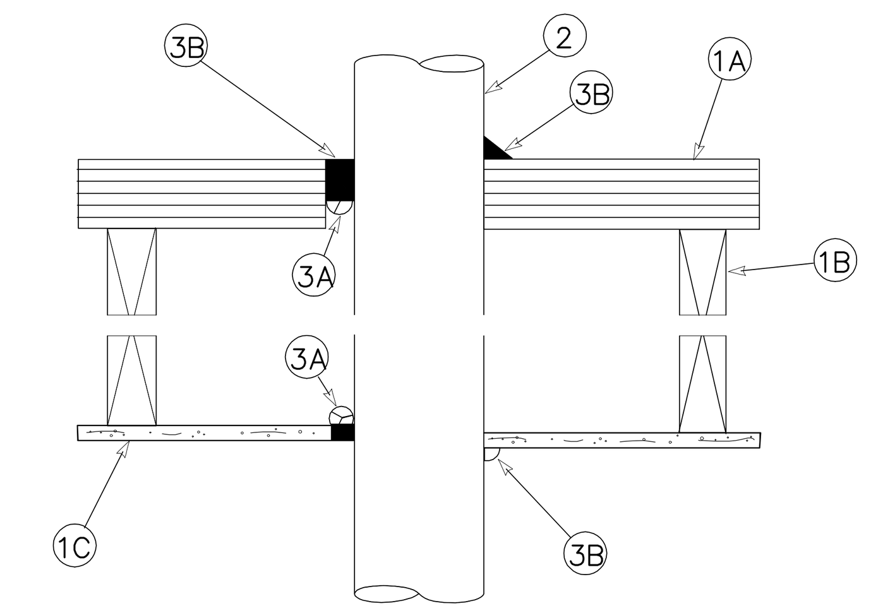
Base layer 5/8" type X gypsum wallboard applied at right angles to 9 1/2" deep wood I-joists 24" o.c. with 1 1/4" Type W drywall screws 12" o.c. **Second** layer 5/8" type X gypsum wallboard applied at right angles to I-joists with 2" Type W drywall screws 12" o.c. Second layer joints offset 24" from base layer joints. **Third** layer 5/8" type X gypsum wallboard applied at right angles to I-joists with 2 1/2" Type W drywall screws 12" o.c. Third layer joints offset 12" from second layer joints. Hat-shaped rigid furring channels 24" o.c. applied at right angles to I-joists over third layer with two 2 1/2" long Type W drywall screws at each I-joist. **Face** layer 5/8" type X gypsum wallboard applied at right angles to furring channels with 1 1/8" Type S drywall screws 12" o.c. Wood I-joists supporting 3/4" T & G edge plywood floor applied at right angles to I-joists with 8d nails 6" o.c. at joints and 12" at intermediate I-joists. **Ceiling provides two-hour fire-resistance protection for wood framing.**

Approx. Ceiling Weight: 12 psf
Fire Test: UL R4024, 00NK26545, 4-27-01, UL Design L556; ULC Design M514

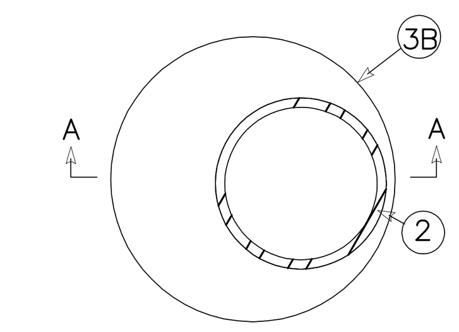
ADD 3" MINERAL FIBER SOUND ATTENUATING INSULATION OVER RESILIENT CHANNELS BETWEEN JOISTS.

STRUCTURAL DISCLAIMER - JOIST SIZE IS REFERENCED MINIMUM FOR FIRE RATING. STRUCTURAL DETERMINATION BY OTHERS

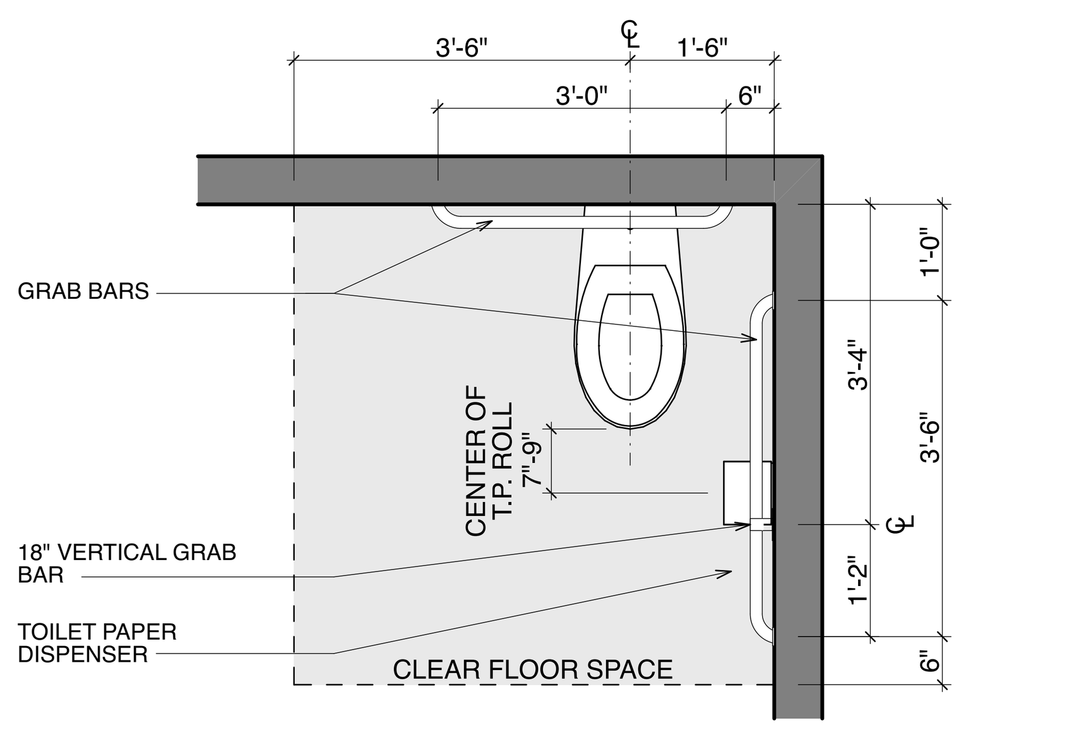
F-C-1069



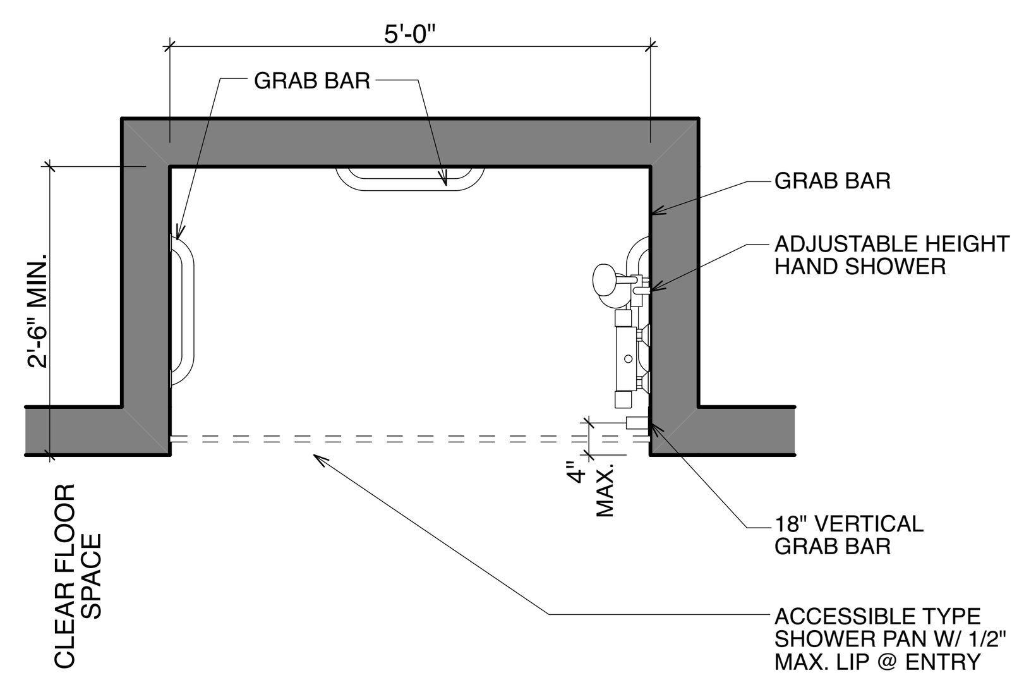
Section A–A



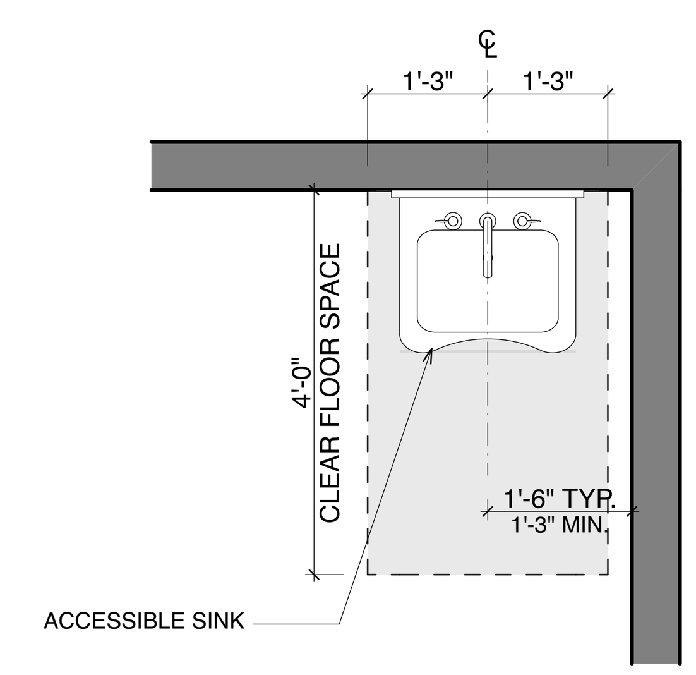
1. Floor/ceiling assembly:
   A.. Flooring system: 5/8" thick plywood/2"x 4" continuous wood decking.
   B. Wood joist: Nom. 2" x 10" lumber joist.
   C. Ceiling system: 1 layer of 5/8" gypsum wallboard, per UL Design.
2. Metallic pipe:
   A. Steel pipe: 8" diameter (or smaller) schedule 40 (or heavier) steel pipe.
   B. Iron pipe: 8" diameter (or smaller) cast or ductile iron pipe.
   C. Conduit: 4" diameter (or smaller) electrical metallic tubing (EMT) or steel conduit.
   D. Copper tubing: 4" diameter (or smaller) Type L (or heavier) copper tubing.
   E. Copper pipe: 4" diameter (or smaller) regular (or heavier) copper pipe. Annular space from minimum 0" to maximum 7/8".
3. Forming and fire stop materials:
   A. Forming material (optional): Foam backer rod packed into opening as a permanent form.
   B. Type IA: Minimum 1/2" thick sealant applied within the annulus, flush with the top of the floor and bottom of the ceiling assemblies.
   Additional sealant to be applied such that a minimum 1/2" crown is formed around the penetrating item.



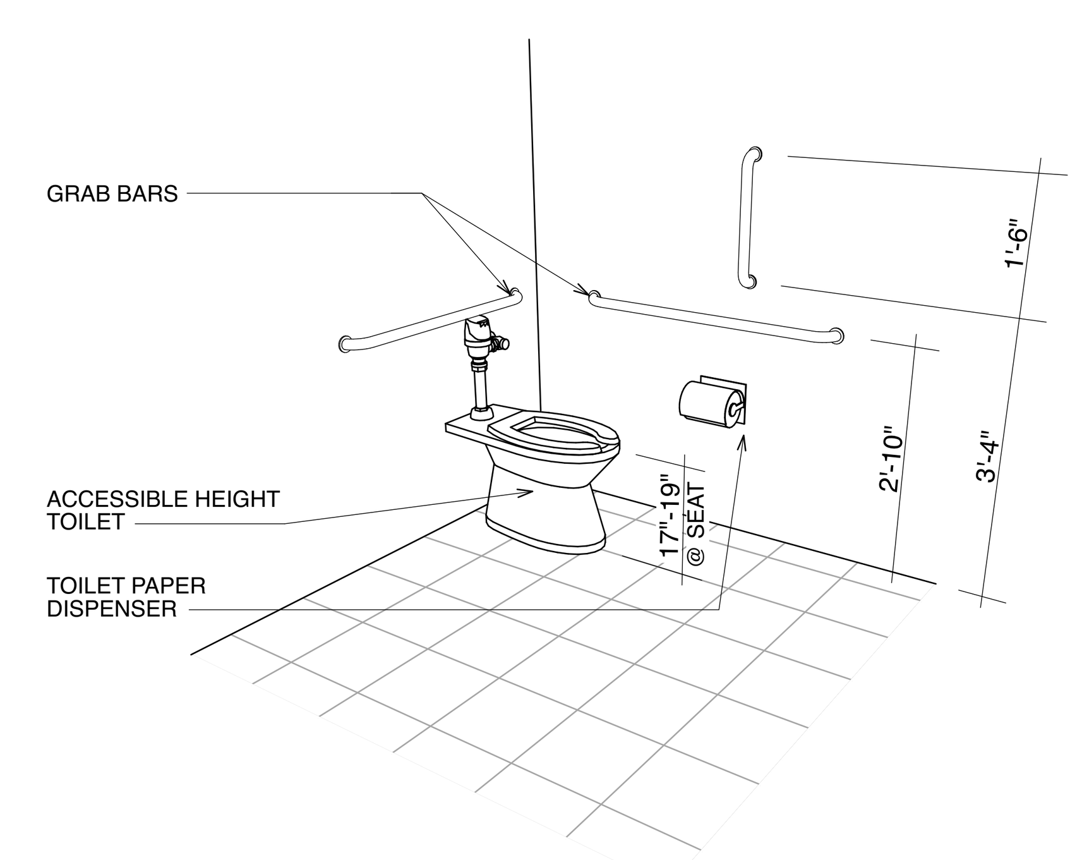
1 TYPICAL ACCESSIBLE TOILET
SCALE: 1/2" = 1'-0"



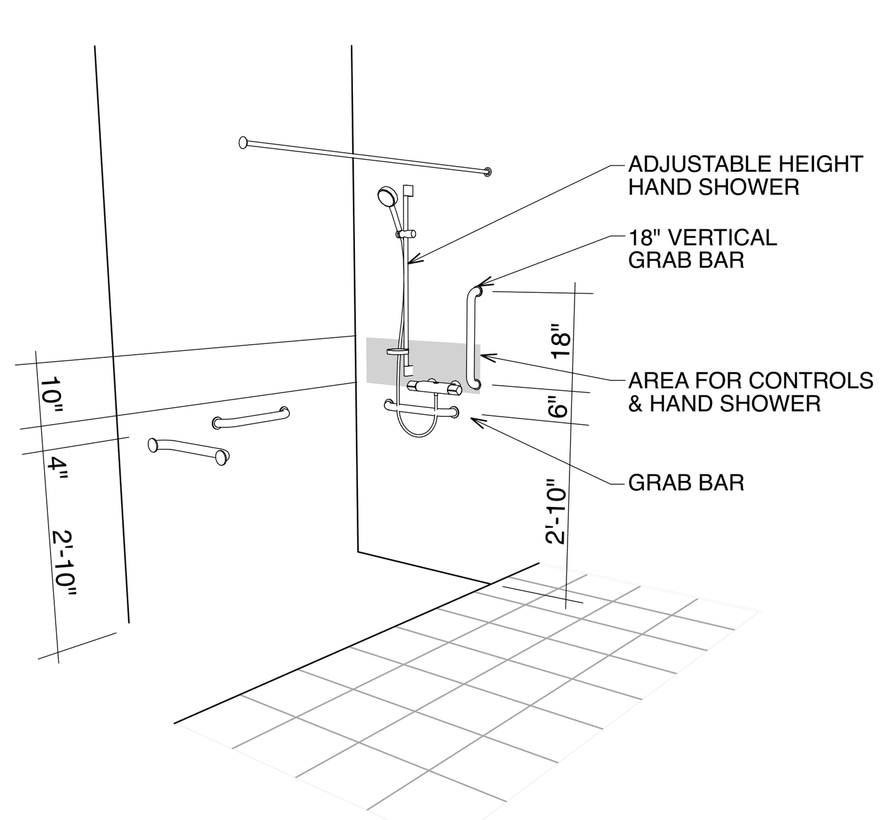
2 ROLL-IN TYPE SHOWER
SCALE: 1/2" = 1'-0"



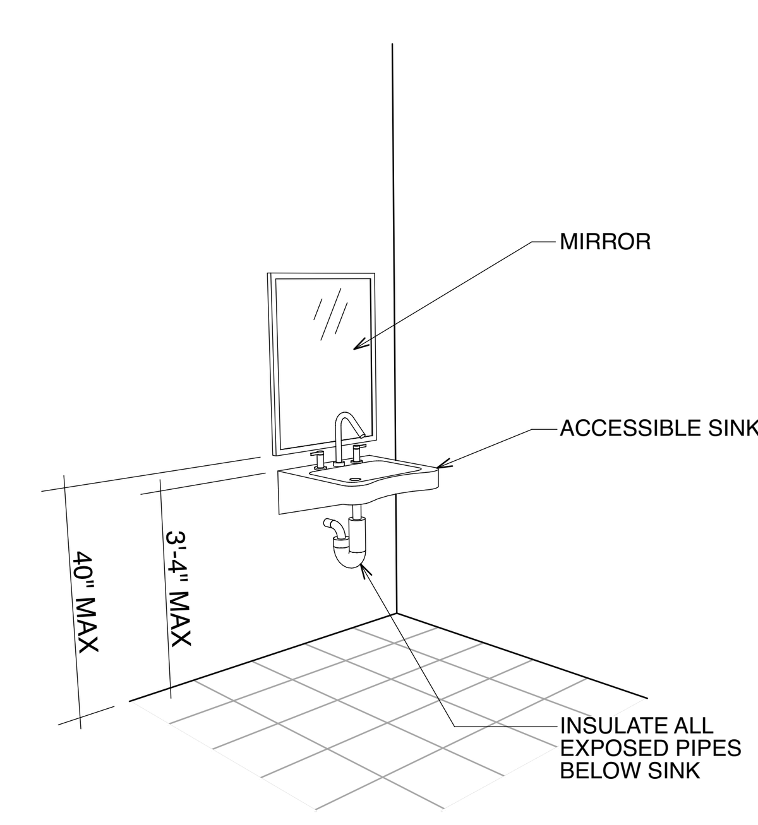
3 WALL MOUNT LAVATORY
SCALE: 1/2" = 1'-0"



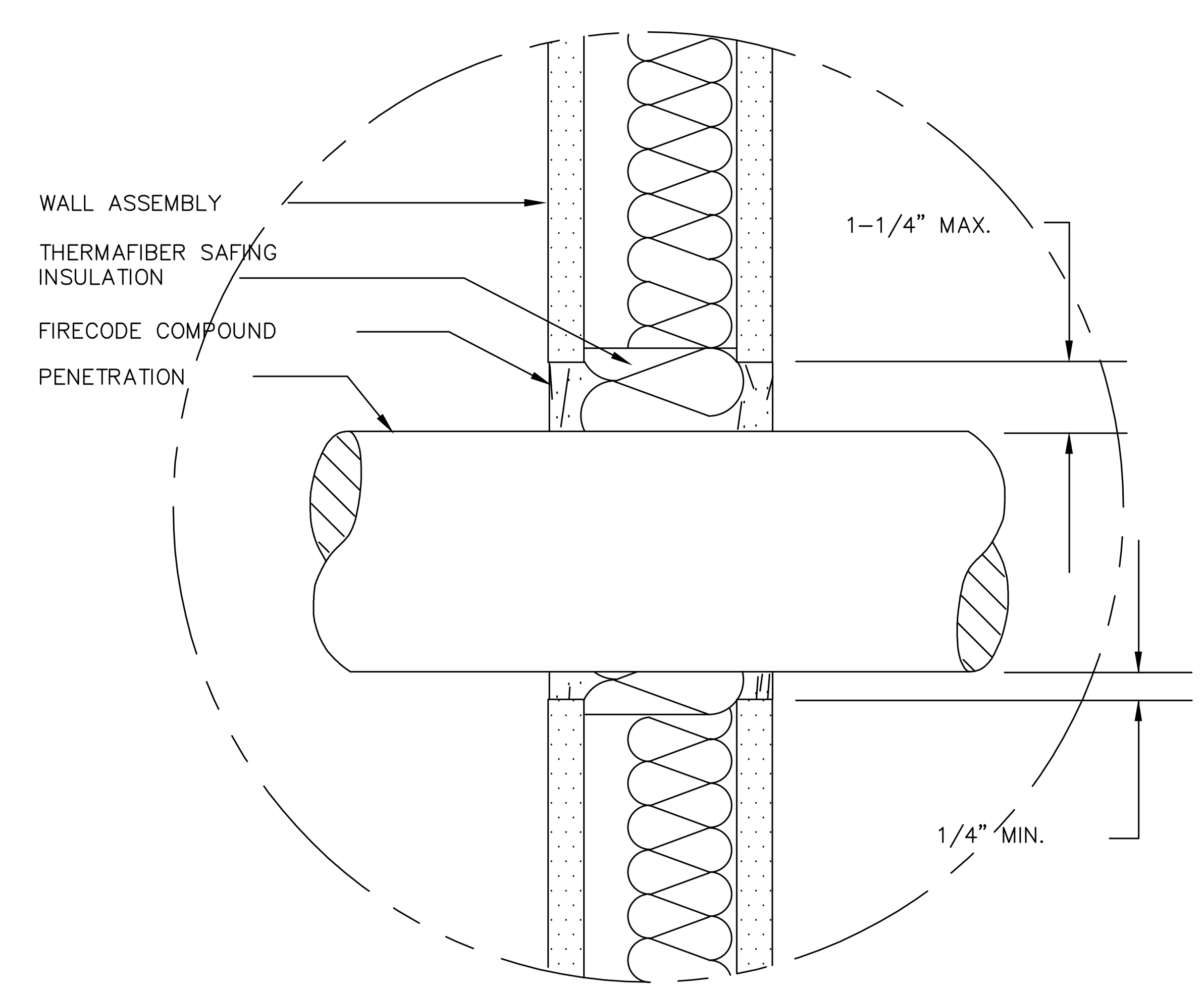
4 TYPICAL ACCESSIBLE TOILET
SCALE: 3/8" = 1'-0"



5 ROLL-IN TYPE SHOWER
SCALE: 1/16" = 1'-0"



6 WALL MOUNT LAVATORY
SCALE: 1/16" = 1'-0"



WALL ASSEMBLY
U.L. SYSTEM NO. 605
SCALE: HALF DATE: 1/27/94
DETAIL SHEET

UNITED STATES GYPSUM COMPANY
This FIRE STOP SYSTEM DETAIL must not be used without a complete evaluation by owners design professional to verify the suitability of the design for a given structure.

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Wall Bracing Simplified

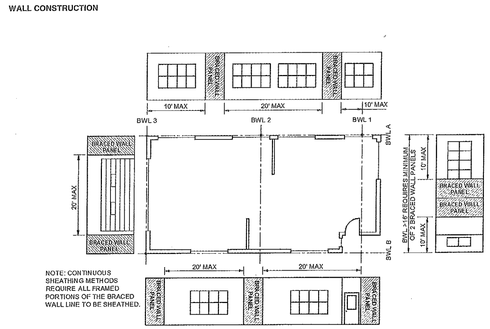
The following options are for narrow wall bracing adjacent to door / window openings and when a 4' braced panel cannot be achieved within 10' of building corners and every 20' of wall length:

Option #1:

Continuous sheathed method (CS-G) R603.10.4:

- 8' plate = 24" wide braced wall panel
- 9' plate = 27" wide braced wall panel
- 10' plate = 30" wide braced wall panel
- 10' plate = 33" wide braced wall panel
- 12' plate = 36" wide braced wall panel

WALL CONSTRUCTION



For SI: 1 foot = 304.8 mm.

FIGURE R602.10.2.2
LOCATION OF BRACED WALL PANELS

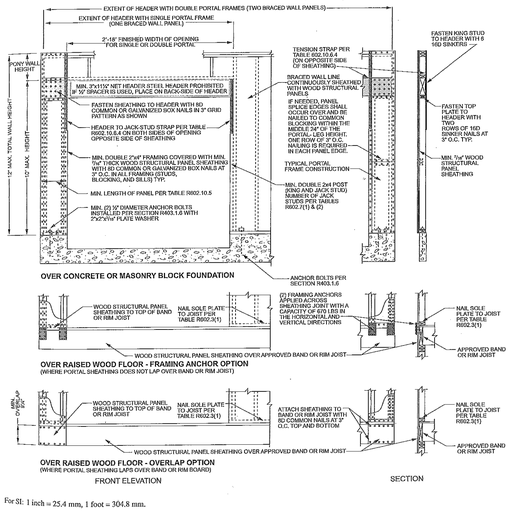
Wall Bracing Simplified

Option # 5

Continuous Sheathed Portal Frame (CS-PF), R602.10.6.4

- 8' plate = 16" wide braced wall panel
- 9' plate = 18" wide braced wall panel
- 10' plate = 20" wide braced wall panel
- 11' plate= 22" wide braced wall panel
- 12' plate = 24" wide braced wall panel

*Special straps required per Figure R602.10.6.4
*Braced wall panels within 10' of corners and every 20' on wall length



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

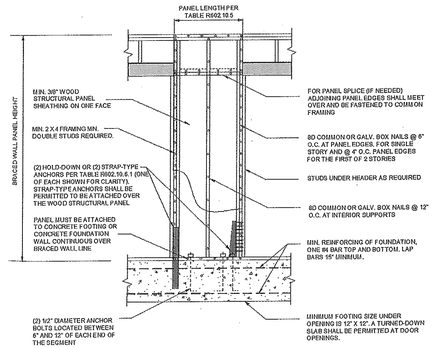
Wall Bracing Simplified

Option #2:

Alternate Braced Wall Panel (ABW) 602.10.6.1:

- 8' plate = 28" wide braced wall panel
- 9' plate = 32" wide braced wall panel
- 10' plate = 34" wide braced wall panel
- 12' plate = 42" wide braced wall panel

*Special straps required per Figure R602.10.6.1
*Braced wall panels within 10' of corners and every 20' on wall length



For SI: 1 inch = 25.4 mm.

FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL

Wall Bracing Simplified

Option #3:

Portal Frame with Hold-Downs (PFH), R602.10.6.2:

Supporting roof only:

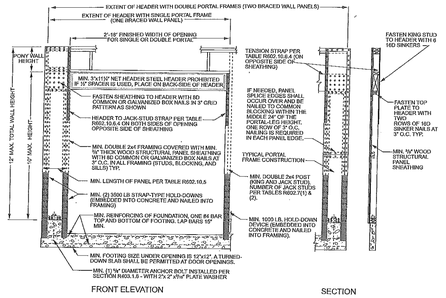
- 8' plate = 16" wide braced wall panel
- 9' plate = 16" wide braced wall panel
- 10' plate = 16" wide braced wall panel
- 11' plate= 18" wide braced wall panel
- 12' plate = 20" wide braced wall panel

Two story:

- 8' plate = 24" wide braced wall panel
- 9' plate = 24" wide braced wall panel
- 10' plate = 24" wide braced wall panel
- 11' plate= 27" wide braced wall panel
- 12' plate = 29" wide braced wall panel

*Special straps required per Figure R602.10.6.2
*Braced wall panels within 10' of corners and every 20' on wall length

WALL CONSTRUCTION



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

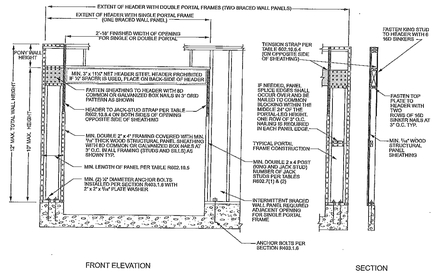
Wall Bracing Simplified

Option #4:

Portal Frame at Garage Opening (PFG), R602.10.6.3

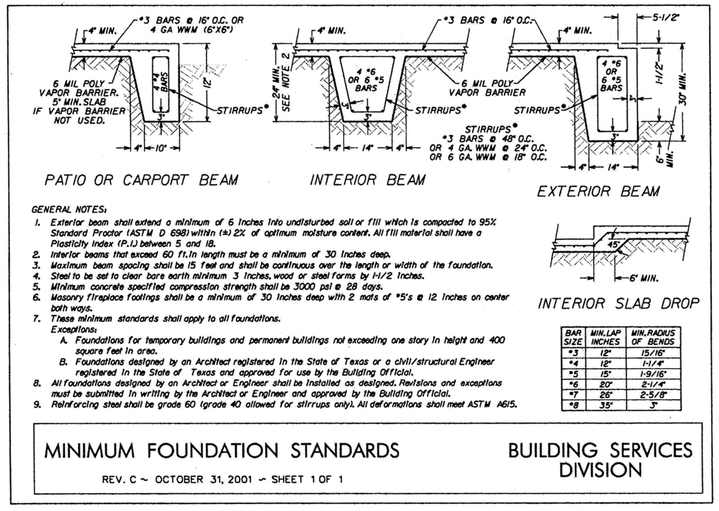
- 8' plate = 24" wide braced wall panel
- 9' plate = 27" wide braced wall panel
- 10' plate = 30" wide braced wall panel
- 11' plate= 33" wide braced wall panel
- 12' plate = 36" wide braced wall panel

*Special straps required per Figure R602.10.6.3
*Braced wall panels within 10' of corners and every 20' on wall length



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.3
METHOD PFG—PORTAL FRAME AT GARAGE DOOR OPENINGS IN SEISMIC DESIGN CATEGORIES A, B AND C



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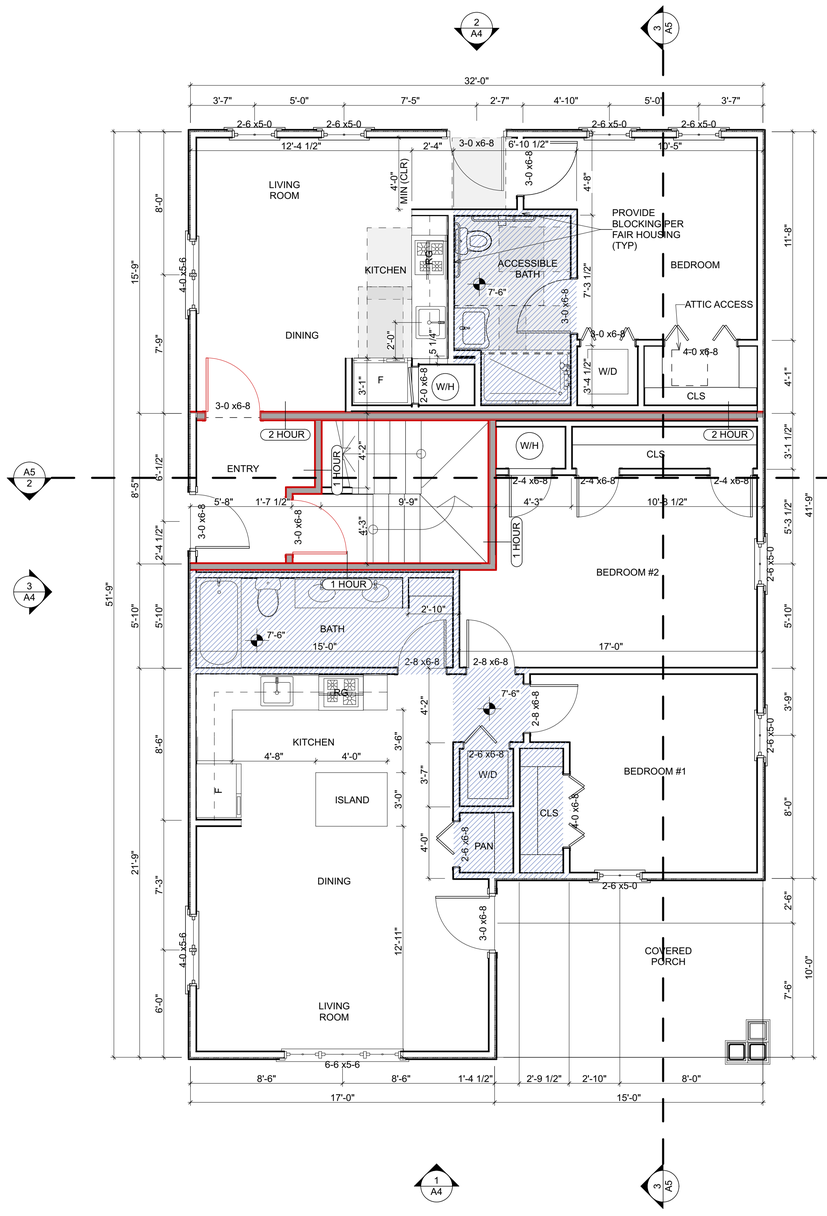
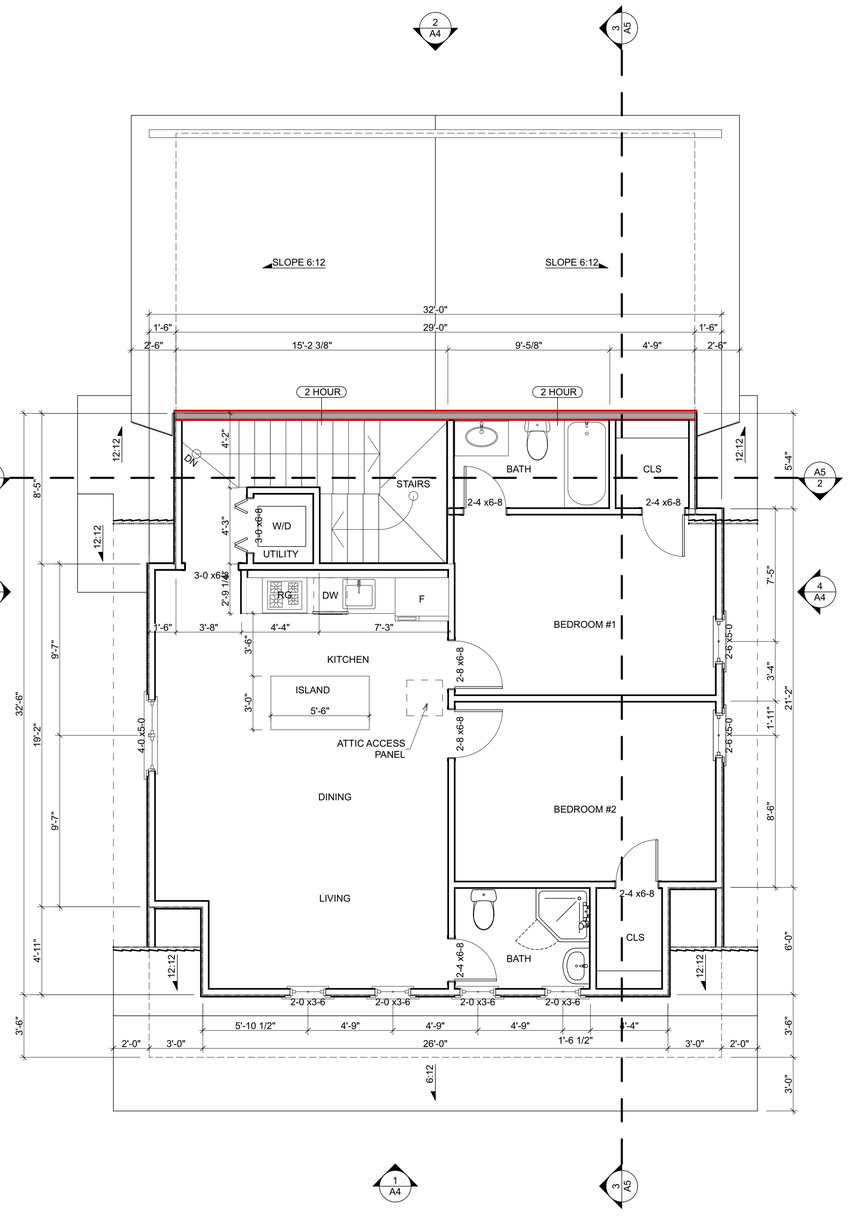


1 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN LEGEND

SHADED WALLS INDICATE FIRE RATED WALL CONSTRUCTION TO SEPARATE UNITS. SEE WALL TAG ON FLOOR PLAN FOR NUMBER OF HOURS WALL IS REQUIRED TO BE RATED FOR. SEE SHEET A0 FOR DETAILS ON RATED ASSEMBLY.

SHADED FLOOR AREA INDICATES 2 HOUR FIRE RATED FLOOR CONSTRUCTION TO SEPARATE UNITS. SEE SHEET A0 FOR DETAILS ON RATED ASSEMBLY.

SHADED FLOOR AREA INDICATES AREAS WITH EITHER A DROPPED CEILING OR A SOFFIT FRAMED AT 7'-6" ABOVE FINISH FLOOR TO ACCOMMODATE AN ABOVE CEILING H.V.A.C. UNIT & DUCTWORK TO SERVE ADJACENT ROOMS.

GENERAL NOTES

1 LOCATE AND MARK ALL UTLITY, SERVICE AND SYSTEMS LOCATIONS PRIOR TO COMMENCEMENT OF WORK. FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITY COMPONENTS.

2 DIMENSIONS ARE SHOWN TO BE FACE OF NOMINAL STUDS, MASONRY VENEER AND TO THE CENTERLINES OF DOORS, WINDOWS AND COLUMNS. (UNLESS NOTED OTHERWISE)

3 PROVIDE WOOD BLOCKING IN WALLS AS REQUIRED TO INSTALL CABINETS, HANDRAILS, TOILET ACCESSORIES, ADA ACCESSIBLE ACCESSORIES PER FAIR HOUSING REQUIREMENTS, ETC.

4 FINISH MATERIALS ARE TO BE INSTALLED BEHIND AND BENEATH APPLIANCES, KNEE SPACES, MOVE-ABLE EQUIPMENT, ETC...

5 COORDINATE EQUIPMENT ROUGH OPENING SIZES AND LOCATIONS WITH THE RESPECTIVE EQUIPMENT.

6 INSTALL INTERIOR DOORS SUCH THAT THERE IS A 4" CLEAR ON THE HINGE SIDE OF THE DOOR TO ADJACENT FINISHED WALL SURFACE (UNLESS NOTED OTHERWISE).

7 NOTE: BUILDINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TEXAS ACCESSIBILITY STANDARDS AND ICC/ANSI A 117.1. GROUND FLOOR DWELLING UNITS TO COMPLY WITH FAIR HOUSING (FH) REQUIREMENTS, NOTE THAT FH REQUIREMENTS VARY DEPENDING ON THE NUMBERS OF UNITS PER SITE WITH MULTIPLE BUILDINGS

8 FOUNDATION PLAN AND DETAILS (PLANS TO SHOW COMPLIANCE WITH CITY OF BRYAN MINIMUM FOUNDATION STANDARDS OR AN APPROVED ENGINEERED DESIGN PRIOR TO CONSTRUCTION) SEE SHEET A0.1

9 EXTERNAL HVAC UNITS WILL BE INSTALLED ON THE REAR OR SIDES OF RESIDENCE ONLY. UNITS ARE TO BE PLACED OUT OF CRITICAL PATHS.

10 EXTERNAL ELECTRICAL PANEL LOCATIONS SHALL BE LOCATED ON THE REAR OR SIDES OF RESIDENCE ONLY.

11 SEE THE "CITY OF BRYAN RESIDENTIAL BUILDING PERMIT APPLICATION REQUIREMENTS" FOR LIST OF DETAILS REQUIRED TO FINISH THIS SET OF DRAWINGS.

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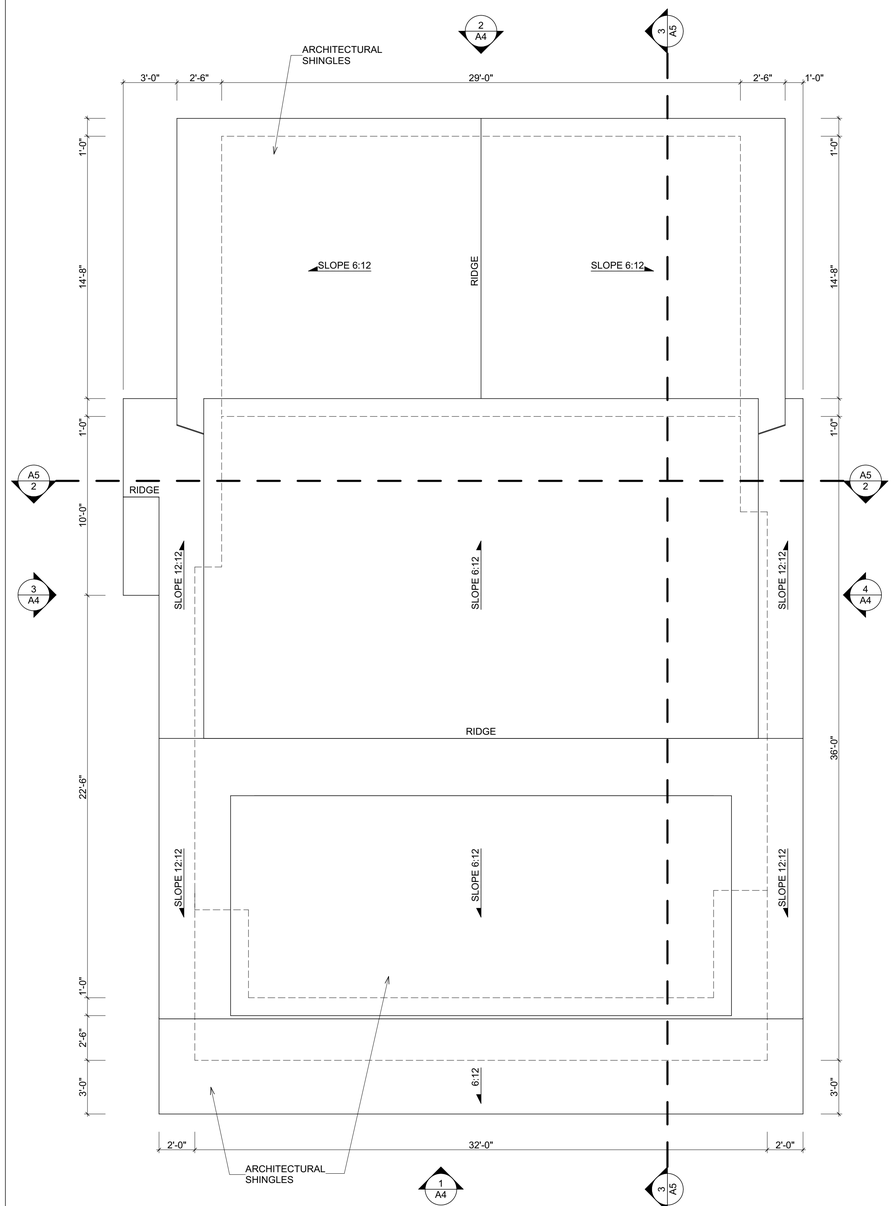
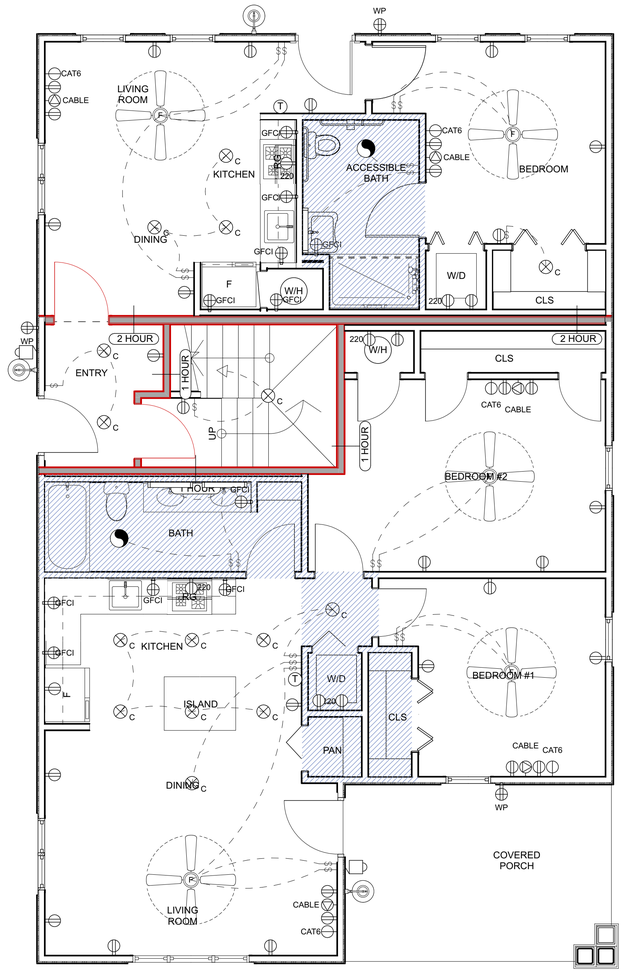


1 ROOF PLAN
SCALE: 1/4" = 1'-0"

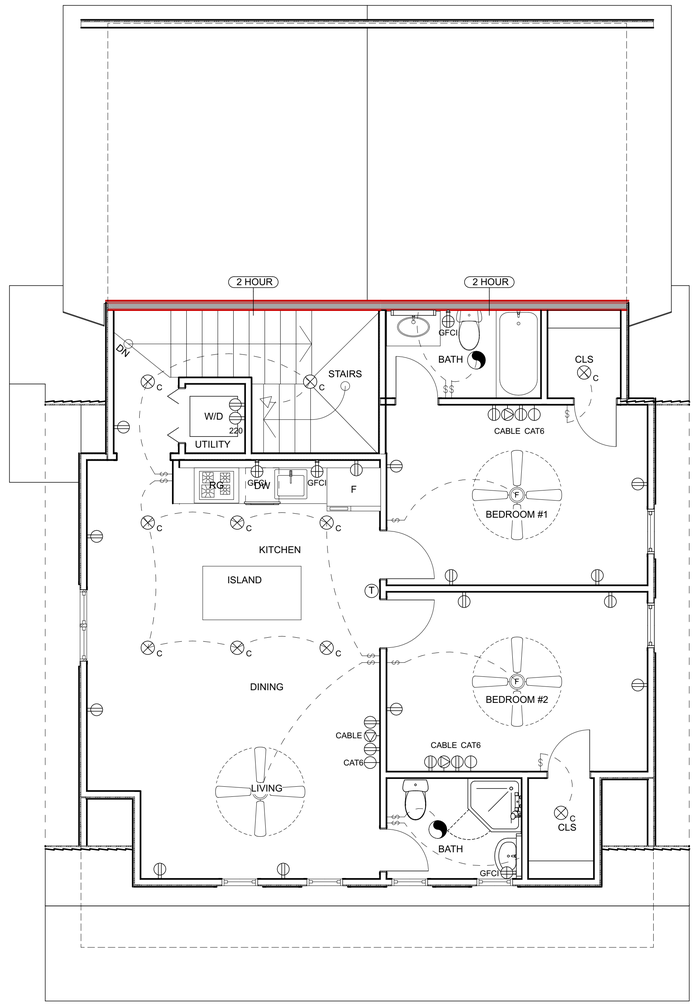
POWER/LIGHTING LEGEND

- CEILING FAN
- DUPLEX OUTLET
- CAT6 ETHERNET OUTLET
- CABLE CABLE OUTLET
- GFCI GFCI OUTLET
- 220 220 OUTLET
- WP WEATHER PROOF OUTLET
- DOOR BELL
- THERMOSTAT
- LIGHT SWITCH
- EXTERIOR WALL MOUNTED LIGHT
- C RECESSED CAN LIGHT
- INTERIOR WALL MOUNTED LIGHT
- EXHAUST FAN

POWER & LIGHTING SHOWN FOR DESIGN INTENT ONLY (POWER & LIGHTING BY OTHERS)



2 FIRST FLOOR POWER & LIGHTING PLAN
SCALE: 1/4" = 1'-0"



3 SECOND FLOOR POWER & LIGHTING PLAN
SCALE: 1/4" = 1'-0"

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NOTE: REFER TO ATTACHED SPECIFICATIONS SECTION 09900 EXTERIOR PAINTS AND COATINGS FOR ALL EXTERIOR FINISHES.

1 FRONT ELEVATION
SCALE: 1/4" = 1'-0"

3 LEFT ELEVATION
SCALE: 1/4" = 1'-0"

2 BACK ELEVATION
SCALE: 1/4" = 1'-0"

4 RIGHT ELEVATION
SCALE: 1/4" = 1'-0"

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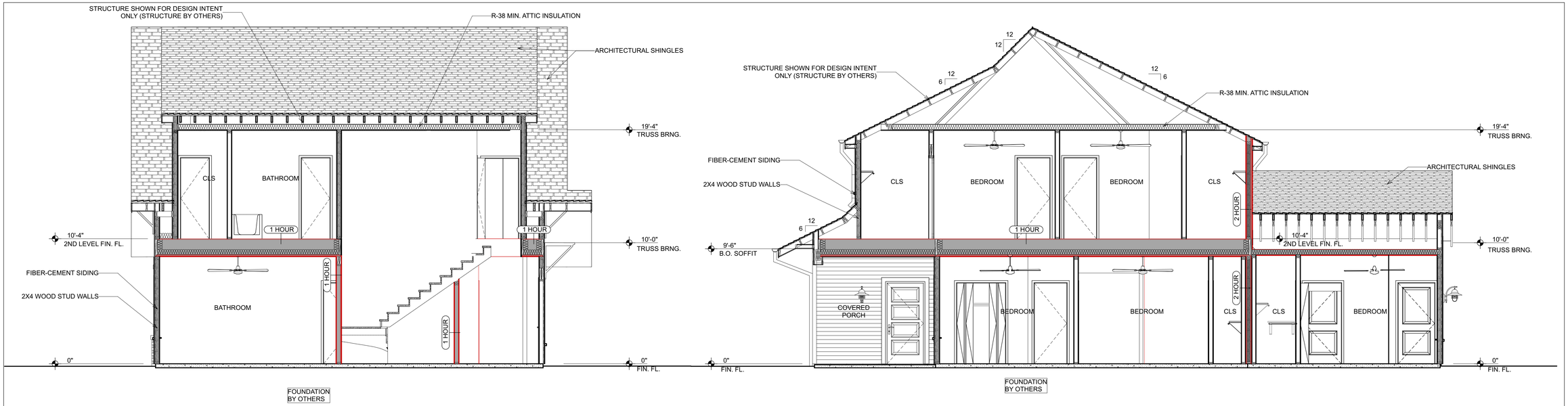
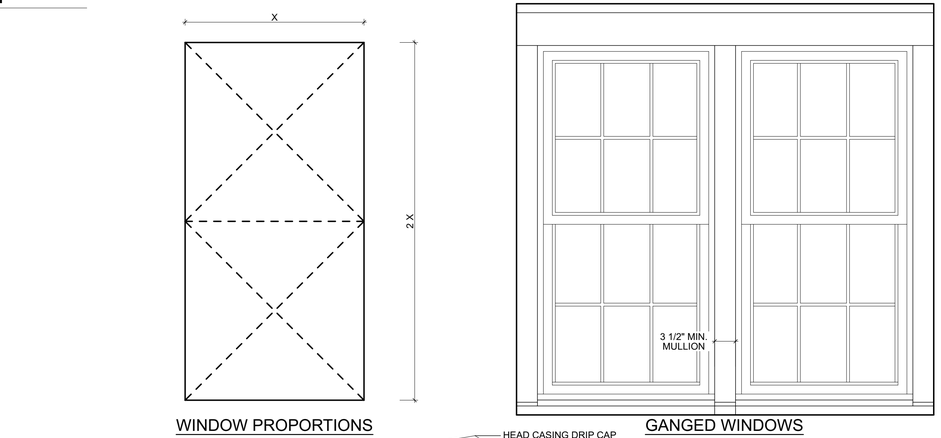


2 CROSS SECTION
SCALE: 1/4" = 1'-0"

3 LONGITUDINAL SECTION
SCALE: 1/4" = 1'-0"



1 TYPICAL WINDOW CASING DETAILS
SCALE: 1" = 1'-0"

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